

Application No.: 10/782,348

Docket No.: JCLA12196-1

AMENDMENTS

In The Specification

[0037] FIGs. 11-12 are drawings, schematically illustrating another optical projection systems, according to a second preferred embodiment of the invention. In FIG 11, the parallel white light beam enters the color splitter 1000, and then split into a primary color beam and a color mixing beam, such as a red beam 1002R and a B/G mixing beam including the blue beam 1002B and green beam 1002G. The red beam 1002R is first described in both-side telecentric design. The both-side telecentric group can be formed, for example, by the condenser lens 1004 and the field lens 1008. A reflection mirror 1006 can be optionally used at a proper position to change the red beam 1002R into the desired direction. In addition, the B/G mixing beam, similar to the red beam, also travels through another both-side telecentric group by a condenser lens 1012 and a field lens 1016, and then is split by another color splitter 1018. Then, these three color beams respectively enter the color-combination prism 814 from three surfaces. The mixed light beam emits out from another surface of the color-combination prism 814 and reaches to a projection lens set 806.

[0038] In this embodiment, it can have different designs how to lead and mix the light beam after the both-side telecentric group. FIG. 12 is another design. The light source 900 provides a parallel white light beam and the light beam enters the color splitter 1100 to be split into a primary color beam and a color mixing beam, such as red beam 1102R and a B/G mixing beam including a blue beam 1102B and a green beam 1102G. The red beam 1102R is described first. The red beam 1102R then travels through a both-side telecentric group, composed by lens

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set 1106. Alternatively, a reflection mirror 1104 can be used at the proper position, so as to change the light beam into the desired direction. In addition, the B/G mixing beam, similar to the red beam 1002R, is reflected by a reflection mirror 1116 and then travels through another both-side telecentric group 1118, and then enters another color splitter 1120 for splitting. Then, these three light beams respectively enter the color-combination prism 814 from three surfaces. The mixed light beam emits out from another surface of the color-combination prism 814 and reaches to a projection lens set 816.